The Hull Story Isn’t the Whole Story

I very much enjoy your magazine, AeroSafety World. Unfortunately, I must offer some fundamental criticisms of a recent article.

It is a pity to see that Flight Safety Foundation continues to use hull loss rates as a measure of aviation safety (ASW, 9/07, p. 51). For a long time, safety indicators based on hull losses have come under heavy criticism from many aviation safety specialists. Hull loss rates simply don’t give us the right picture regarding aviation safety. The value of the aircraft often determines whether an accident is a hull loss or not.

For instance, the same type of accident that occurred with the same amount of damage to two different aircraft are both not necessarily counted in the hull loss statistics. If one aircraft is relatively new, it could be that the accident does not result in a hull loss. However, if the other aircraft is old, it could make the threshold to become a hull loss even if the damage is minor.

I understand that the Foundation is just quoting data from Boeing. However, I believe that the Foundation should not simply copy their statistics without considering the clear limitations of this information. The Foundation is clearly the body to educate the aviation community on this topic. I hope you will do so in the future.

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The editor replies: See Jim Burin’s cover story (ASW, 2/07, p. 16) in which he declares that the Foundation is, indeed, stepping away from the use of “hull loss” in favor of a different measure, “major accident,” which he defined in a sidebar article. We reiterated our approach to accident classification in an endnote of the Data Link article you refer to.

As for the Boeing data, we cannot change what they publish to conform to how we think it should be. The Data Link article’s statement that “worldwide commercial jet hull loss accidents less frequently resulted in fatalities in the past 10 years compared with earlier years” accurately reflected Boeing’s data, and we drew no unwarranted conclusions about safety from the fact.

The Boeing report actually agreed with your, and our, position; it said, “Generating statistics based upon hull loss has been de-emphasized in this publication, although it has not been completely eliminated. Hull loss is not necessarily a good indicator of accident severity. The age of the fleet and the economics of repairs are resulting in less severe accidents becoming hull loss accidents.”

Your letter will be a good reminder for everyone that we do need to move away from an outdated and misleading metric.

Foot Note

With respect to the article “Cautious Footwork” (ASW, 9/07, p. 10), we want to inform you that, after more than 11 million flight hours performed by the EMB-145 family of aircraft (which includes the Legacy 600), we are not aware of any reports of a TCAS switch-off or selection of STANDBY mode on the transponder’s RMU in connection with the use of the footrest device.

All technical and ergonomic analyses relating to the use of the footrest by EMB-145 (including Legacy 600) pilots demonstrate that the normal use of the footrest does not create a risk of an involuntary or accidental switching off of the TCAS.

All such technical elements have been submitted to the Brazilian Certification Authority (ANAC) and are currently under review by ANAC and the FAA.

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AeroSafety World encourages comments from readers, and will assume that letters and e-mails are meant for publication unless otherwise stated. Correspondence is subject to editing for length and clarity. Write to J.A. Donoghue, director of publications, Flight Safety Foundation, 601 Madison St., Suite 300, Alexandria, VA 22314-1756 USA, or e-mail <donoghue@flightsafety.org>. 